



Filing Receipt

Received - 2021-07-19 01:22:09 PM
Control Number - 51812
ItemNumber - 225

From: MARK MARTIN <MarkMartinTexas@outlook.com>

Sent: Thursday, July 15, 2021 12:31 PM

To: Customer Service <customer@puc.texas.gov>; brad.jones@ercot.com

Subject: Attention Chairman Peter Lake, PUC Texas, and Brad Jones, CEO ERCOT. From Mark Martin, PEC member in Leander

Mr. Lake, Mr Jones (guessing at your email address): I read comments about the Texas electricity market in a July 13, 2021 article by Ben Thompson of the Community Impact Newspapers, where Mr. Lake is quoted to say "...we are taking a blank-slate approach for a full overhaul and redesign of this market to drive reliability."....

I have downloaded and am reading the ERCOT July 13 Roadmap that was mentioned.

Since 2019, I have been reading extensively about the options for energy management in Texas and elsewhere. I am trying to walk the talk too, by installing solar panels on my roof and driving an electric car. I am not employed by any company involved in these questions. My energy impact in one household is limited, but yours is literally as "big as Texas". So, I would like to offer these comments on the steps being considered for the Texas electric grid redesign.

The Roadmap mentions onsite fuel supply options (point 57); wind-solar reliability (point 58); and black start planning (point 37). I also note that ERCOT has a video on the website about Distributed Generation, and there is a Battery Energy Storage Task Force at ERCOT that meets regularly. It appears to me that that ERCOT personnel are engaged in moving battery utilization forward, and that more extensive use of battery assets throughout the Texas Grid could be a major step towards greater reliability and flexibility. So, where is the implementation???

Battery systems are analogous to an onsite fuel supply for intermittent generation sites. By storing energy at the generation site, even power generated at an inconvenient time can be absorbed for later use. If held at the generator or out along the grid, that power can be ready to dispatch in milliseconds and when positioned along the grid, possibly with minimal transmission losses. Recently, South Australia used a new MW-sized Tesla battery system to avoid a black start event, surely the Task Force is familiar with that report.

I do not have a home battery on my system, due to the initial cost of batteries in 2017. An acquaintance of mine did install two Powerwalls with his solar system in 2020 (unit prices have fallen), and as a result of his storage capacity he did not experience any power shutdown during the February 2021 storm event. I am now saving \$\$ to buy a battery retrofit for my home. I hope this will assure my future power stability, BUT: that only fixes my personal power problems. A systemwide battery adoption plan is needed.

I note that a number of private companies (including TESLA and others) are rapidly building battery systems within ERCOT, many of these in the megawatt capacity range, and not necessarily connected to a solar or wind generation facility. These firms are voting for batteries with their wallets! PEC has a small, considered experimental, battery system in Johnson City.

It is concerning that the new technology of batteries (including the growing range of available battery chemistries and other storage methods) appears to be getting little notice from you gentlemen, or from

the Governor. While this is “new” for the power sector, every consumer in Texas with a cellphone can understand the serviceability that battery storage of energy can provide.

Please give battery storage systems more attention, implementation planning, and economic support in your Roadmap. These systems should range from large grid management-sized systems, to individual homeowner installations, to virtual powerplant installations that can bring dependable, affordable energy services into neighborhoods and remote rural areas.

I look forward to hearing more about the Texas grid plan.

Original: email, Government, PUC

Cc in Word doc: C:\Users\Mark Martin\Documents\personal\Government contacts